Areas seeded with a mixture of native grasses and forbs (flowers) provide excellent wildlife habitat. Wildlife managers use native plants to provide nesting, feeding, loafing, and escape habitat for turkey, quail, pheasant, rabbit, and many songbirds. The benefits of native plants are many, but establishing and maintaining such a stand takes planning and care. When properly established and maintained restored prairies add beauty and wildlife habitat to any farm.

SEED SELECTION

Natives seeded for wildlife purposes should be seeded at 4 - 8 lbs. PLS/acre. Seed mixes should be a minimum 4:1 ratio of grass seed to forb seed by weight, with a 2:2 ratio preferred. However, forb seed can be very expensive, so cost should be considered before deciding on a mixture. Site conditions also need to be considered with any mixture because some natives grow best on dry or mesic sites while others flourish on wet sites. Most wildlife managers include 4-5 grass species and 5-15 forb species in their seed Seeding rates for tall native mixtures. grasses such as big bluestem, Indian grass, and switchgrass should be reduced when planted with diverse forb mixtures because



they can crowd or shade out forb species. The list below gives a few native species and their preferred growing sites.

DRY OR MESIC SITES

Grasses

Little Bluestem Side-oats Grama* Big Bluestem Indian Grass

Flowers

Black-eyed Susan
Butterfly Milkweed*
Canada Milk Vetch
Gray-headed Coneflower
Ox-eye Sunflower
Pale Purple Coneflower
Partridge Pea
Prairie Coreopsis*
Purple Prairie Clover
Rough Blazingstar*
Round-headed Bush Clover*
Wild White Indigo

* Plant on dry sites, not mesic areas

WET SITES

Grasses

Big Bluestem Indian Grass Switchgrass Canada Wildrye

Flowers

Canada Anemone Gray-headed Coneflower Great Blue Lobelia New England Aster Rattlesnake Master Rigid Goldenrod Tall Blazing-Star Swamp Milkweed

SOIL PREPARATION

Soil preparation and control of existing vegetation is the most important step in prairie reestablishment. Preparation can begin in the fall or the spring, although fall tillage generally produces the best seedings.

- **1.** Disk site to remove existing vegetation. If existing vegetation is heavy, it may be necessary to mow the site first.
- **2.** Following first flush of green weeds in the spring spray site with "Round-UpTM" herbicide to kill existing vegetation.
- **3.** Pack the site using a cultipacker or castiron field roller before planting to get a good, firm seedbed.
- **4.** Do not fertilize the site, as this will benefit weeds.
- * If weeds are a big problem, consider planting the site in soybeans the season before prairie planting. Prairie seeds can then be seeded directly into the soybean stubble.

SEEDING

Most natives are seeded in the spring using a native grass/forb drill. Another technique, called a dormant or frost seeding, is to drill or broadcast the seed into prepared sites after 1 November. Dormant seedings use the freeze/thaw cycle to work the seed into the ground and break seed dormancy. Dormant seedings work best with mixtures containing heavy amounts of forb seed.

- **1.** Seed from 15 May through 1 July to minimize weed problems and avoid heavy spring rains.
- **2.** Seed about 4 8 pounds of PLS seed/acre using a drill. If a broadcast seeder is used, increase the application rate by 10 20%. If a dormant seeding is used, increase the application rate by 20%.
- 3. Prairie seed should not be planted more

than 1/8" - 1/4" depth or it will not germinate. After seed is broadcast or drilled, roll or cultipack until the soil is very firm. About 50% of seed should be visible on the soil surface when complete.

POST-SEEDING MANAGEMENT

Post-seeding weed control is an important part of successful prairie reestablishment, especially in a dry year

- **1.** When weed growth is 10-12" tall, mow down to about 4-6" in height with either a sickle or a rotary mower.
- **2.** Mow again to 4-6" if weed growth reaches 10-12" (this mowing should be in mid- to late September).
- **3.** Do not use herbicides for broadleaf weeds if forb species have been planted.
- **4.** Mow often enough so the cuttings do not smother emerging seedlings.

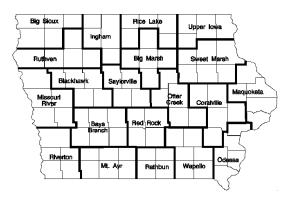
SECOND SEASON MANAGEMENT AND BEYOND

- **1.** After the first growing season, burn the prairie in late March or early April. Continue these annual spring burns until prairie plants dominate the prairie, usually 3-5 years after seeding.
- **2.** Any chemical weed control should be limited to the spot spraying of individual nuisance species (e.g., Canadian thistle, sour dock).
- **3.** Once established a burning schedule and maintenance plan should be established for the site.

PRAIRIE SEED AND PLANT SOURCES

You should try to obtain seed from local sources, as close to home as possible. Local seed is best adapted to the area. Out of state sources should only be considered if no other sources are available.

If you have questions please contact your local wildlife biologist or call 515-281-4687.



Rathbun Unit	641/774-4918
Sweet Marsh Unit	319/334-9191
Rice Lake Unit	641/324-2431
Big Sioux Unit	712/472-3751
Bays Branch Unit	515/993-3911
Ingham Unit	712/362-2091
Big Marsh Unit	641/456-3730
Red Rock Unit	515/961-0716
Upper Iowa Unit	319/382-4895
Black Hawk Unit	712/657-2639
Mt Ayr Unit	641/464-2220
Ruthven Unit	712/262-4177
Odessa Unit	319/523-8319
Saylorville Unit	515/432-2235
Riverton Unit	712/374-3133
Maquoketa Unit	319/652-3132
Wapello Unit	641/682-3552
Coralville Unit	319/354-8343
Otter Creek Unit	641/752-5521
Missouri River Unit	712/423-2426

PRAIRIE SEEDING GUIDELINES



Iowa Department of Natural Resources Wallace State Office Building

Wallace State Office Building Des Moines, IA 50319-0034

